



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,553	08/09/2001	Michael G. Dykhoff	56950US002	5531

7590 08/25/2004

Attention: David B. Patchett
Office of Intellectual Property Counsel
3M Innovative Properties Company
P.O. Box 33427
St. Paul, MN 55133-3427

EXAMINER

RHEE, JANE J

ART UNIT	PAPER NUMBER
----------	--------------

1772

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/925,553	Applicant(s) DYKHOFF, MICHAEL G. CP	
	Examiner Jane Rhee	Art Unit 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-41 and 44-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-41 and 44-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. Request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/28/2004 entered.

Rejections Withdrawn

2. The 35 U.S.C. 102(b) rejection anticipated by Wilson of claims 31,34-36,38-31,44-45,47 has been withdrawn due to applicant's amendment in response 5/28/2004.
3. The 35 U.S.C. 103(a) rejection over Wilson in view of Eiermann of claims 37,46 has been withdrawn due to applicant's amendment in response 5/28/2004.
4. The 35 U.S.C. 103(a) rejection over Wilson in view of Sakno of claims 32,33 has been withdrawn due to applicant's amendment in response 5/28/2004.

Response to Arguments

5. Applicant's arguments with respect to claims 31-41,44-47 have been considered but are moot in view of the new ground(s) of rejection.

New Rejections

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 31,35-36,38-39,41,44-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Ward (GB 2278083).

Ward discloses a fire barrier assembly comprising a plurality of fire stop articles arranged in an opening (figure 3 number 6) without a secondary support structure, the fire stop article comprising an interior insulating material (figure 4 number 10) and an intumescent material (figure 4 number 12 and 11) arranged around at least a portion of the interior material (figure 4 number 12 and 11), the intumescent material consisting essentially of filler material, binder material, and a hydrated alkali metal silicate intumescent component (page 2 paragraphs 5-6). Ward discloses that the interior insulating material comprises inorganic fibrous material (page 2 paragraph 3). Ward discloses that the inorganic fibrous material comprises ceramic board or man made mineral fibers (page 2 paragraph 3). Ward discloses that the interior insulating material has opposed first and second opposed major surfaces, and further wherein the sheets of intumescent material are arranged adjacent each of the first and second surfaces (figure 4 number 11 and 12). Ward discloses that the intumescent sheets is adhesively bonded with the insulating material first and second major surfaces (page 3 paragraph 1). Ward discloses that the intumescent material completely surrounds the interior insulating material (page 3 paragraph 2 and page 4 paragraph 1). Ward discloses at least one item passing through the opening (figure 3 number 6 and 7).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ward in view of Sakno (5634304).

Ward discloses the fire barrier assembly described above. Ward fails to disclose that the fire stop article further comprises an enclosure arranged around the intumescent material. Sakno teaches an enclosure arranged around the intumescent material for the purpose of containing the expansion of the intumescent material and focus its expansion on collapsing the conduit without reliance upon containment by surrounding concrete (col. 3 lines 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art to have provided Ward with an enclosure arranged around the intumescent material in order to contain the expansion of the intumescent material and focus its expansion on collapsing the conduit without reliance upon containment by surrounding concrete (col. 3 lines 1-4) as taught by Sakno.

8. Claims 37,46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ward in view of Eiermann (4584214).

Ward discloses that the inorganic fibrous material comprises ceramic board or man made mineral fibers (page 2 paragraph 3). Ward fails to disclose that the mineral wool has a density of at least 4 pounds per cubic foot. Ward fails to disclose that the

opening has an area of greater than 300 square inches. Eiermann discloses that the mineral wool has a density of at least 4 pounds per cubic foot (col. 4 lines 55-57) for the purpose of preventing heat penetration for a sufficiently long time (col. 4 lines 66-68).

Therefore, it would have been obvious to one of ordinary skill in the art to have provided Ward with mineral wool that has a density of at least 4 pounds per cubic foot in order to prevent heat penetration for a sufficiently long time (col. 4 lines 66-68) as taught by Eiermann.

Ward teaches an opening in a partition for inserting fire stops (figure 3 number 6), therefore, it would have been an obvious matter of design choice to provide the opening an area greater than 300 square inches, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

9. Claims 34,40,47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ward in view of Wilson (5502937).

Ward discloses the fire barrier assembly described above. Ward fail to disclose that the intumescent material further includes organic char-forming components. Ward fail to disclose that the partition has a concrete substrate for adhesion and the fire barrier installation passes a hose stream test in accordance with ASTM Test E814.

Wilson teaches that the intumescent material further includes organic char-forming components (col. 6 line 49) for the purpose of providing a flexible intumescent fire retardant layer (col. 6 line 44-45). Wilson discloses that the partition has a concrete

Art Unit: 1772

substrate for adhesion and the fire barrier installation passes a hose stream test in accordance with ASTM Test E814 (col. 14 lines 4-20) for the purpose of evaluating systems comprising thermal insulation and the flexible composites of the invention (col. 14 line 1).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's to provide Ward with the intumescent material that further includes organic char-forming components in order to provide a flexible intumescent fire retardant layer (col. 6 line 44-45) as taught by Wilson.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Ward with the partition that has a concrete substrate for adhesion and the fire barrier installation that passes a hose stream test in accordance with ASTM Test E814 in order to evaluate systems comprising thermal insulation and the flexible composites of the invention (col. 14 line 1).

As to the fire stop articles that are held in place in the opening by compression, Ward inherently discloses that the fire stop articles are held in place in the opening by compression since the fire stop articles are bonded to the opening by adhesive (page 5 line 14-17) which inherently creates a compression between the fire stop article and the opening.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane Rhee whose telephone number is 571-272-1499. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Ahmad can be reached on 571-272-1487. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jane Rhee
August 12, 2004


NASSER AHMAD
PRIMARY EXAMINER 8/17/04